



Public Notice

U S Army Corps
of Engineers
Huntington District

In reply refer to Public Notice No. 2007-285-GAU Issuance Date: August 12, 2008

Stream: Rader Fork

Closing Date: September 11, 2008

Please address all comments and inquiries to:

U.S. Army USACE of Engineers, Huntington District

ATTN: CELRH-OR-F Public Notice No. (*reference above*)

502 Eighth Street

Huntington, West Virginia 25701-2070

Phone: (304) 399-5710

PUBLIC NOTICE: The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

REGULATORY PROGRAM: Since its early history, the United States Army Corps of Engineers (USACE) has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the USACE Regulatory Program.

SECTION 10: The USACE is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition or capacity of navigable waters of the United States. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

SECTION 404: The USACE is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including wetlands. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

TO WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions of Section 404 of the Clean Water Act. This notice serves as the USACE request to the West Virginia Department of Environmental Protection (WVDEP) to act on Section 401 Water Quality Certification for the following application.

APPLICANT: Alex Energy, Inc.
Post Office Box 707
Summersville, West Virginia 26651

LOCATION: The proposed project would be located approximately 1.85 miles northwest of Gilboa, in the Grant District of Nicholas County, West Virginia. The project area can be found at latitude 38°19'30" and longitude 80°57'24" on the Gilboa USGS 7.5-minute quadrangle. The proposed project would be constructed in the watersheds of unnamed tributaries of Hutchinson Branch, an unnamed tributary of Jones Branch, and unnamed tributaries of/and Rader Fork. Hutchinson Branch and Jones Branch are tributaries of Peters Creek. Rader Fork and Peters Creek are tributaries of Twentymile Creek, which ultimately flows into the Gauley River, a traditional navigable water of the US.

DESCRIPTION OF THE PROPOSED WORK: The applicant proposes to discharge dredged and/or fill material into approximately 12,655 linear feet or 1.98 acres of waters of the United States in conjunction with the construction, operation and reclamation of the Federal Surface Mine [Pending approval under Surface Mining Control and Reclamation Act (SMCRA) Permit S-3009-07 and National Pollutant Discharge Elimination System (NPDES) Permit WV1022270]. Project components would include two permanent valley fills (Valley Fills No. I and J), six mine-through areas, two in-stream sediment pond embankments, and one culverted stream crossing. Construction of the sediment ponds would result in temporary, direct discharges of dredged or fill material into 1,210 linear feet (0.308 acre) of perennial stream channels. Construction of the culverted stream crossing would result in temporary, direct discharges of dredged or fill material into 37 linear feet (0.005 acre) of perennial stream channel. Construction of the proposed underdrain systems associated with Valley Fills Nos. I and J would result in the permanent, direct discharges of dredged material into 7,661 linear feet (1.345 acres) of intermittent stream channels and 872 linear feet (0.087 acre) of ephemeral stream channels. Mineral removal activities would result in the permanent, direct impacts to 48 linear feet (0.008 acre) of intermittent stream channels and 2,297 linear feet (0.175 acre) of ephemeral stream channels. Details regarding these proposed activities are listed in the Table 1 attached to this public notice. The purpose of the proposed project is to discharge dredged/fill material to construct attendant and associated features (i.e. overburden disposal, coal recovery, sediment control etc.) and to facilitate efficient extraction of 4 million tons of coal reserves in the SMRCA permitted area (531.80 acres of which 81.72 acres would encompass the proposed valley fills and sediment ponds) for a period of 4 years. Coal removed from the project area would be processed and moved offsite for delivery to customers. Plans for the proposed facility are attached to this public notice.

ALTERNATIVE ANALYSIS: This project is not considered to be water dependent; therefore, the applicant is required to show that other less damaging practicable alternatives are not available that would achieve the overall project purpose. No permit will be issued until our review of the alternative analysis clearly shows that upland alternatives are not available to achieve the overall project purpose. The applicant considered two practicable alternatives: Mountaintop/Area Removal Method Alternative and a combination of area, mountaintop contour and highwall mining. While Mountaintop/Area Removal Method Alternative would constitute a practicable way to recover the reserves (~ 1,494,064 tons) down to and including the Stockton seam, it would not be practicable to recover the substantial areas of Coalburg reserves (Coalburg A, Coalburg B, Coalburg C, and Lower Coalburg) (~1,225,028, 2,892,066, 1,955,043, and 33,799 tons, respectively) due to excessive overburden to coal ratios (greater than 16:1 ratio based on current market and site-specific criteria), which would require large disposal areas to accommodate the excess overburden material (~ 86,400,417 million cubic yards) that would be generated as result of the mineral extraction operations. As a result, it has been estimated that approximately 33,050 linear feet of waters of the US and 924 acres of land would be impacted under this alternative. If Coalburg reserves are not recovered, there would be a potential for future mining and re-disturbance of the project area.

By using a combination of mountaintop, area, contour and highwall, the applicant would be able to recover all of the reserves down to and including the Coalburg seam. Under this alternative, the applicant would use mountaintop mining techniques to recover the reserves down to and including the Stockton seam throughout the project area. Contour mining would be used to recover the Coalburg A, B, C and Lower Coalburg seams along the ridgeline of the project area while highwall mining would be used to recover the remaining reserves of the Coalburg B and C seams. Approximately 12,655 linear feet of waters of the US and 531.80 acres of land would be impacted under this alternative.

The applicant evaluated 7 hollows within a one half-mile radius of the project area as potential locations for overburden storage. Sites 3 (contains ~ 5,442 linear feet of waters of the US), 4 (contains ~ 2,318 linear feet of waters of the US), 5 (contains 2,065 linear feet of waters of the US) were in close proximity to the targeted reserves and would provide adequate capacity for excess overburden storage, but the applicant neither owns nor controls this property and the slope of the valley floor where the toe of the fill would be located is over 20 percent. Sites 6 (contains ~ 2,216 linear feet of waters of the US) and 7 (contains 5,059 linear feet of waters of the US) would provide adequate capacity for excess overburden storage; however, these two sites are not located within a reasonable proximity to the targeted reserves. Sites 1 (contains ~ 2,827 linear feet of waters of the US) and 2 (contains ~ 9,108 linear feet of waters of the US) would provide adequate capacity for excess overburden storage, are located within a practicable distance to the mine site, have the required slope to provide sufficient valley fill stability and the applicant controls the property via a lease with the land company. In an effort to reduce the project's overall impacts while maintaining a practicable project, the applicant considered a reduced mining area comprising 531.80 acres (924 acres) as opposed to that would reduce impacts to waters of the US to 12,655 linear feet (33,050 linear feet) while not adversely impacting the ability to mine the area when taking into consideration cost, existing technology, and logistics.

MITIGATION PLAN: The project area has been previously timbered and gas reserves have been developed. Mining has occurred using deep and surface mining techniques within and adjacent to the project area. In evaluating a project area containing waters of the United States, consideration must be given to avoiding impacts on these sites. The USACE has determined that approximately 6,298 linear feet of ephemeral stream channel, 18,669 linear feet of intermittent stream channel and 5,233 linear feet of perennial stream channel exists within the proposed project. As a result of avoidance measures, the applicant proposes to impact 8,956 linear feet of intermittent stream (1,295 linear feet would be restored upon completion of mining activities) and 3,699 linear feet of ephemeral stream (2,827 linear feet would be restored upon completion of mining activities). Therefore, the applicant has avoided impacts to approximately 5,233 linear feet of perennial stream, 9,713 linear feet of intermittent stream and 1,534 linear feet of ephemeral stream within the delineated area by reducing the mineral extraction area and excess overburden generation, optimizing fill placement and locating the proposed sediment ponds at the toes of the proposed valley fills. Upon completion of mining activities, 1,295 linear feet of intermittent and 2,827 linear feet of ephemeral stream would be re-established to their approximate pre-disturbance contours. If waters of the United States cannot be avoided, impacts must be minimized. The applicant has proposed efforts to minimize impacts to aquatic resources throughout project implementation. The applicant proposes to incorporate best management practices (BMPs), as required by SMCRA and NPDES, to the maximum extent possible and by using the best technology currently available. To limit the impacts of the proposed operation, the design of the valley fills were optimized by placing excess overburden on top of fills higher than the lowest coal seam proposed to be mined. This procedure (Approximate Original Contour+/Excess Overburden Guidelines) was developed by the WVDEP and was endorsed by the United States Environmental Protection Agency as constituting minimization under the Section 404(b)(1) Guidelines. Valley Fills I and J comply with these guidelines.

Additionally, the proposed valley fills would be constructed in hollows previously impacted by post-SMCRA mining and timbering activities. With regard to sediment control, run-off must pass through the proposed designed sediment control structures before entering the streams to prevent downstream sedimentation in any considerable quantities. These measures would minimize the potential for excessive erosion and deposition of sediment in waters of the United States. The applicant proposes to manage discharges in accordance with WVDEP-established NPDES threshold limits for suspended solids and settleable solids. Further minimization of impact would be achieved through timely backfilling, grading and revegetation of operational areas and stabilization of fill material, which would be expected to minimize the amount of earth disturbance at any given time and would reduce the potential for erosion and sedimentation. With regard to the proposed road crossing, the culvert would be installed in a manner to adequately pass both low and high water flows and would accommodate fluctuating water levels and aquatic life passage. The applicant examined numerous alternatives to avoid all impacts to waters of the United States and determined them to be impracticable based on cost effectiveness, and technical feasibility in light of the overall project purpose.

The applicant has submitted a Compensatory Mitigation Plan (CMP) to compensate for unavoidable impacts to waters of the United States. The mitigation components include: restoring approximately 4,122 linear feet of temporarily impacted stream channels to their approximate pre-disturbance conditions; creating 8,575 linear feet of stream channel; restoring 13,700 linear feet of stream channels within the Rader Fork watershed; establishing, enhancing or restoring 50-foot riparian areas along the 26,397 linear feet for total of 30.3 acres; and permanently protecting all mitigation areas via a real estate instrument. The CMP has been developed with a watershed-based approach and incorporates the USACE Interim Functional Assessment Approach.

WATER QUALITY CERTIFICATION: A Section 401 Water Quality Certification is required for this project. It is the applicant's responsibility to obtain certification from the WVDEP.


HISTORIC AND CULTURAL RESOURCES: It has been determined there are no properties included in or eligible for listing in the National Register of Historic Places (NRHP) that would be affected by the proposed undertaking. A report entitled "Phase I Archaeological Survey for the Proposed Lonestar Surface Mine in Grant District, Nicholas County, West Virginia" was prepared and submitted to West Virginia Division of Culture and History, State Historical Preservation Office (SHPO) for review. SHPO has reviewed the report and, in a letter dated October 30, 2007, stated the report addresses their concerns regarding the presence of intact archaeological resources within the project area and no further consultation is necessary. Additionally, the SHPO recommended that if the Neal Cemetery would be impacted or relocated that an evaluation of its potential to be included in the NRHP be completed. The applicant proposes to establish a 100-buffer zone around this cemetery. Regarding architectural resources, the SHPO indicated there are two structures that are 50 years or older within the line-of-sight of the project area, but these structures are not eligible for or listed in the NRHP and no further consultation is required. A copy of this public notice will be sent to the SHPO for their review. Additional comments concerning archeological sensitivity of a project area should be based upon collected data.

ENDANGERED/THREATENED SPECIES REVIEW: Two federally listed endangered species, the Indiana bat (*Myotis sodalis*) and Virginia big-eared bat (*Corynorhinus townsendii virginianus*) may occur within the project area. In the summer of 2007, a bat-mist net survey was completed in the project area to determine presence or probable absence of the Indiana bat within the proposed project area. No federally-listed bats were captured during this survey. The proposed project area was also surveyed for abandoned mine portals that could support summer or winter colonies of the endangered Virginia big-eared bat or provide hibernaculum for the Indiana bat. No abandoned mine portals were found within the proposed project area. Based on these facts, the WVDEP, in a letter dated October 10, 2007, has determined the proposed project is not likely to adversely affect endangered or threatened species or their critical habitat. This public notice serves as a request to the USFWS for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the ESA Species Act of 1972 (as amended).

PUBLIC INTEREST REVIEW AND COMMENT: Any person who has an interest that may be adversely affected by the issuance of a permit may request a public hearing. The request must be submitted in writing to the District Engineer on or before the expiration date of this notice and must clearly set forth the interest, which may be adversely affected, and the manner in which the interest may be adversely affected by the activity. This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the USACE, and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the United States Environmental Protection Agency pursuant to Section 404(b)(1) of the CWA. Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered including the cumulative effects thereof; of those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. A permit will be granted unless its issuance is found to be contrary to the public interest.

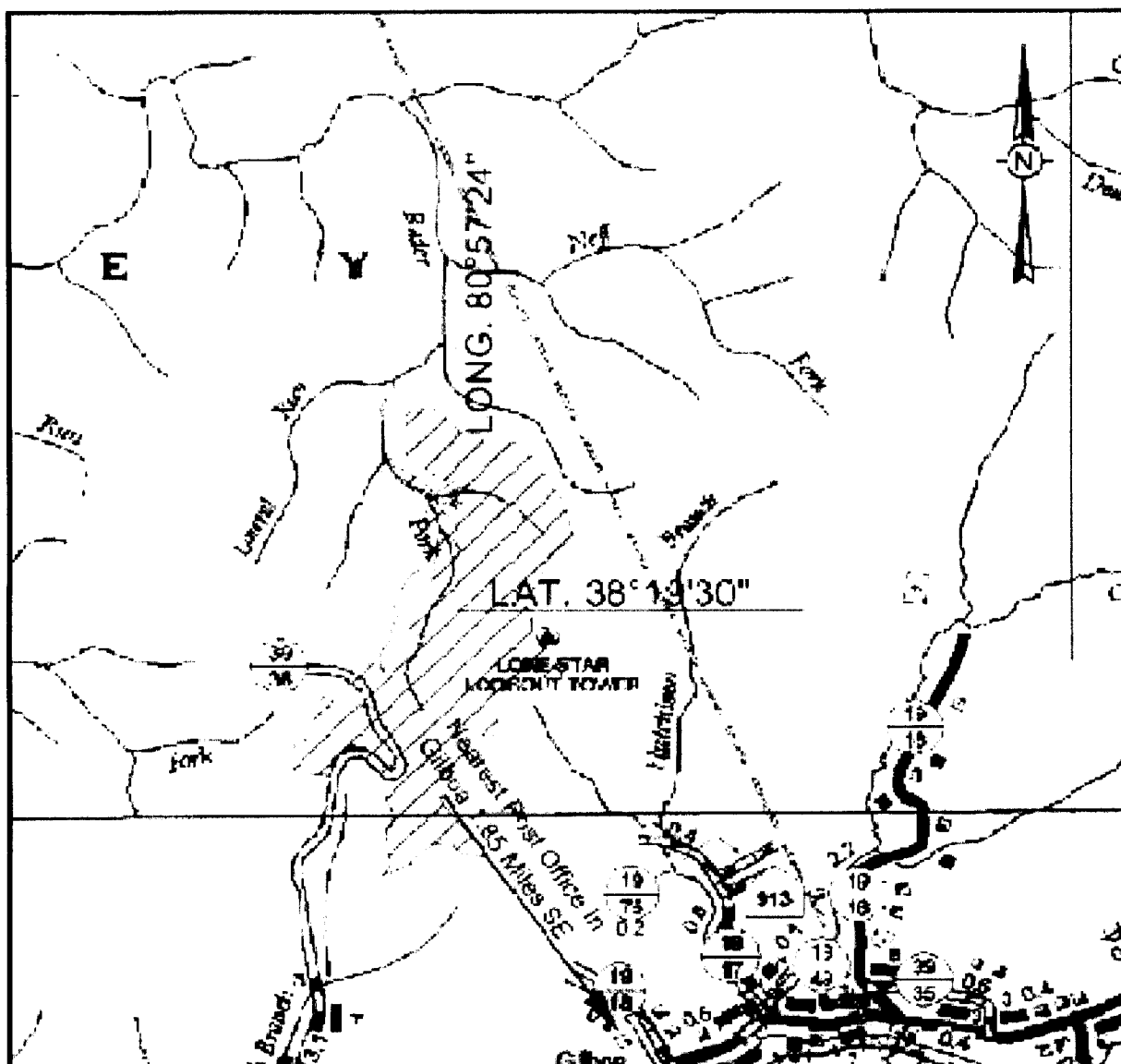
SOLICITATION OF COMMENTS: The USACE is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. For accuracy and completeness of the administrative record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. Any comments received will be considered by the USACE to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before the close of the comment period listed on page one of this Public Notice. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to Mrs. Teresa Spagna, Project Manager, South Regulatory Section, CELRH-OR-FS, USACE Huntington District, 502 Eighth Street, Huntington, West Virginia 25701-2070. Please note names and addresses of those who submit comments in response to this public notice become part of our administrative record and, as such, are available to the public under provisions of the Freedom of Information Act. Thank you for your interest in our nation's water resources. If you have any questions concerning the above, please contact Mrs. Teresa Spagna of the Energy Resource Section at (304) 399-5610.



Ginger Mullins, Chief
Regulatory Branch

(W)



LOCATION MAP

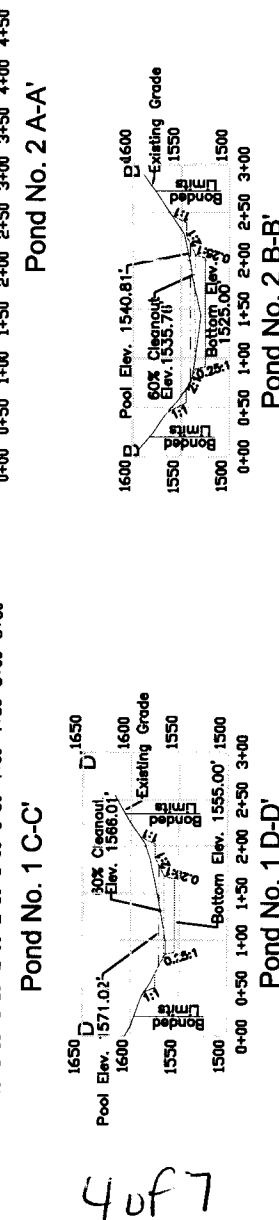
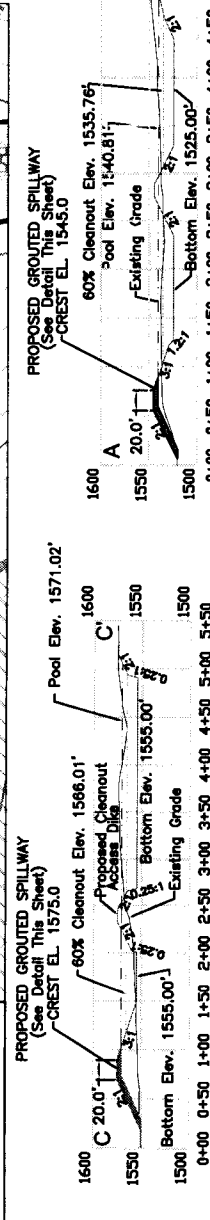
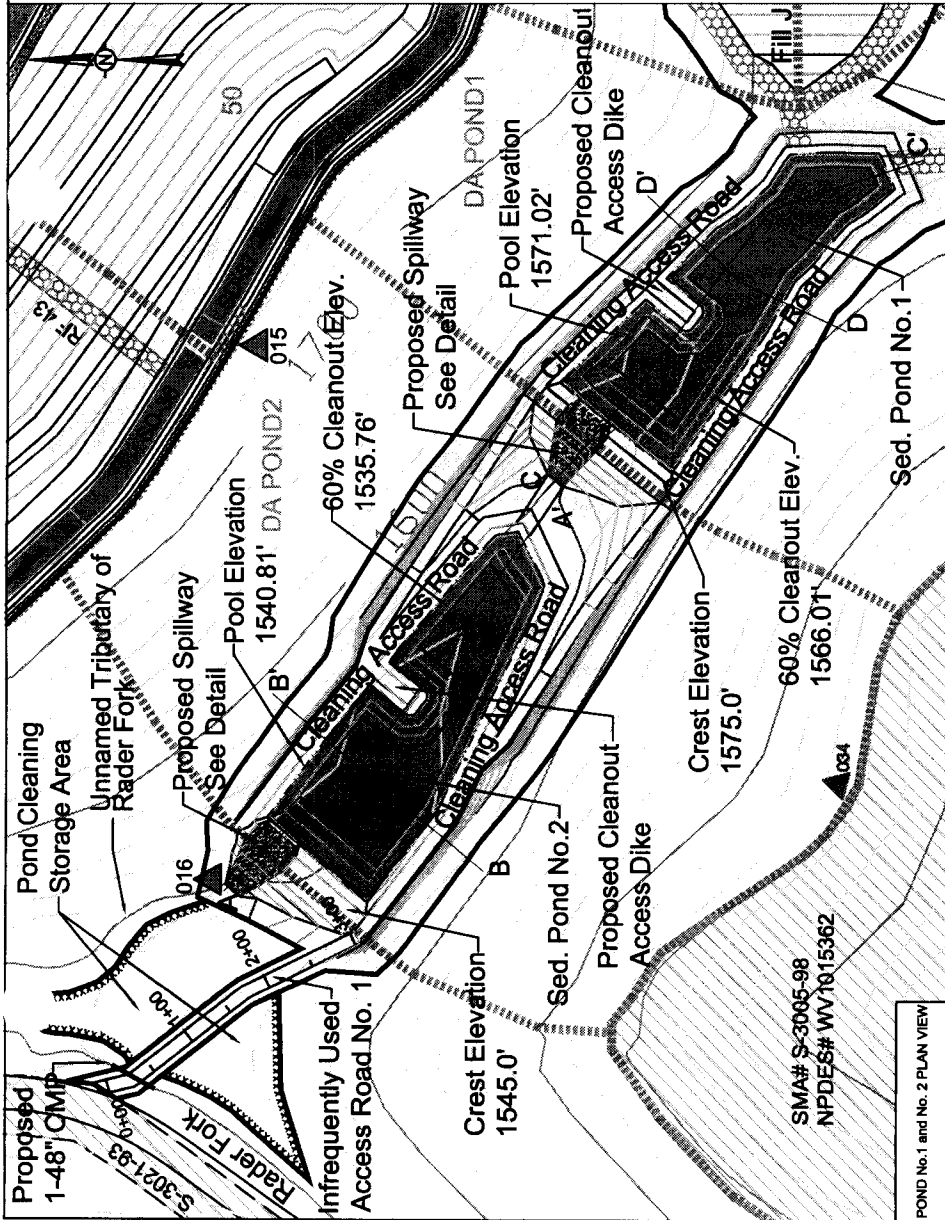
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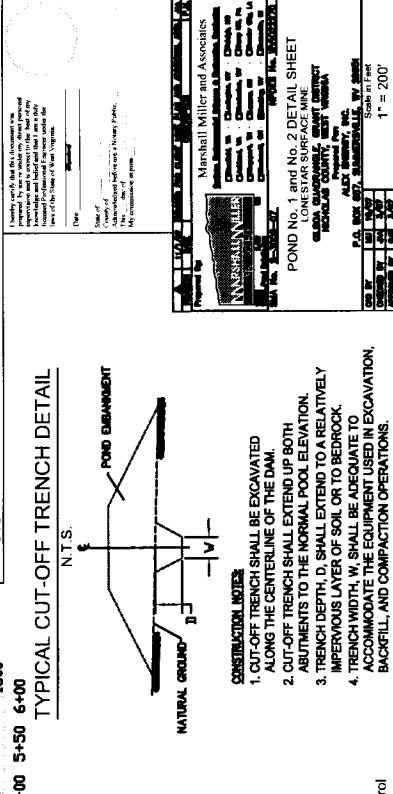
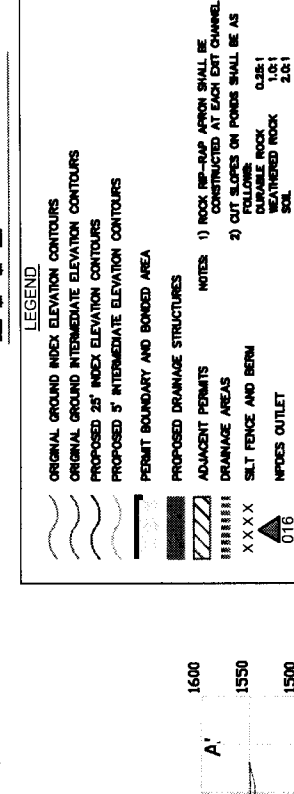
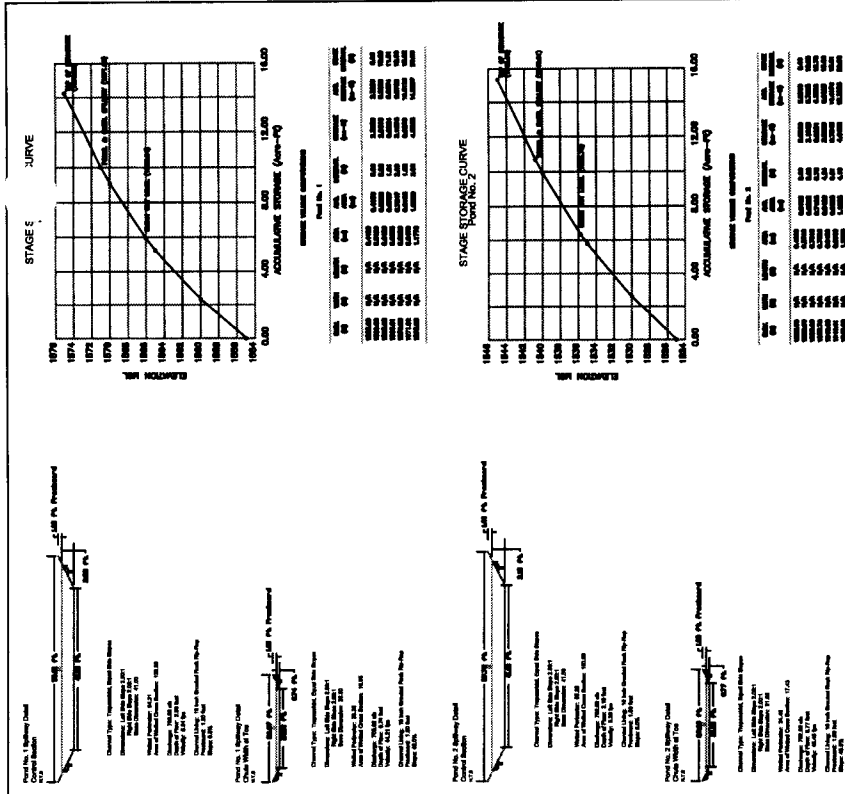
WV DEPT. OF HIGHWAYS
GRANT DISTRICT
NICHOLAS COUNTY
GILBOA QUADRANGLE
SCALE: 1" = 1 MILE

Receiving streams:

Unnamed Tributaries of/and Hutchinson Branch, and Unnamed Tributaries of/and Jones Branch; all of Peters Creek; Unnamed Tributaries of/and Rader Fork of Twentymile Creek; all of Gauley River of Kanawha River.



Required Sediment Control Capacity = *13.43 ac-ft
Sediment Control Capacity Provided = *10.01 ac-ft
 *Pond No. 1 and No. 2 are in-series and provide 20.70 ac-ft of sediment control



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STAGE 85

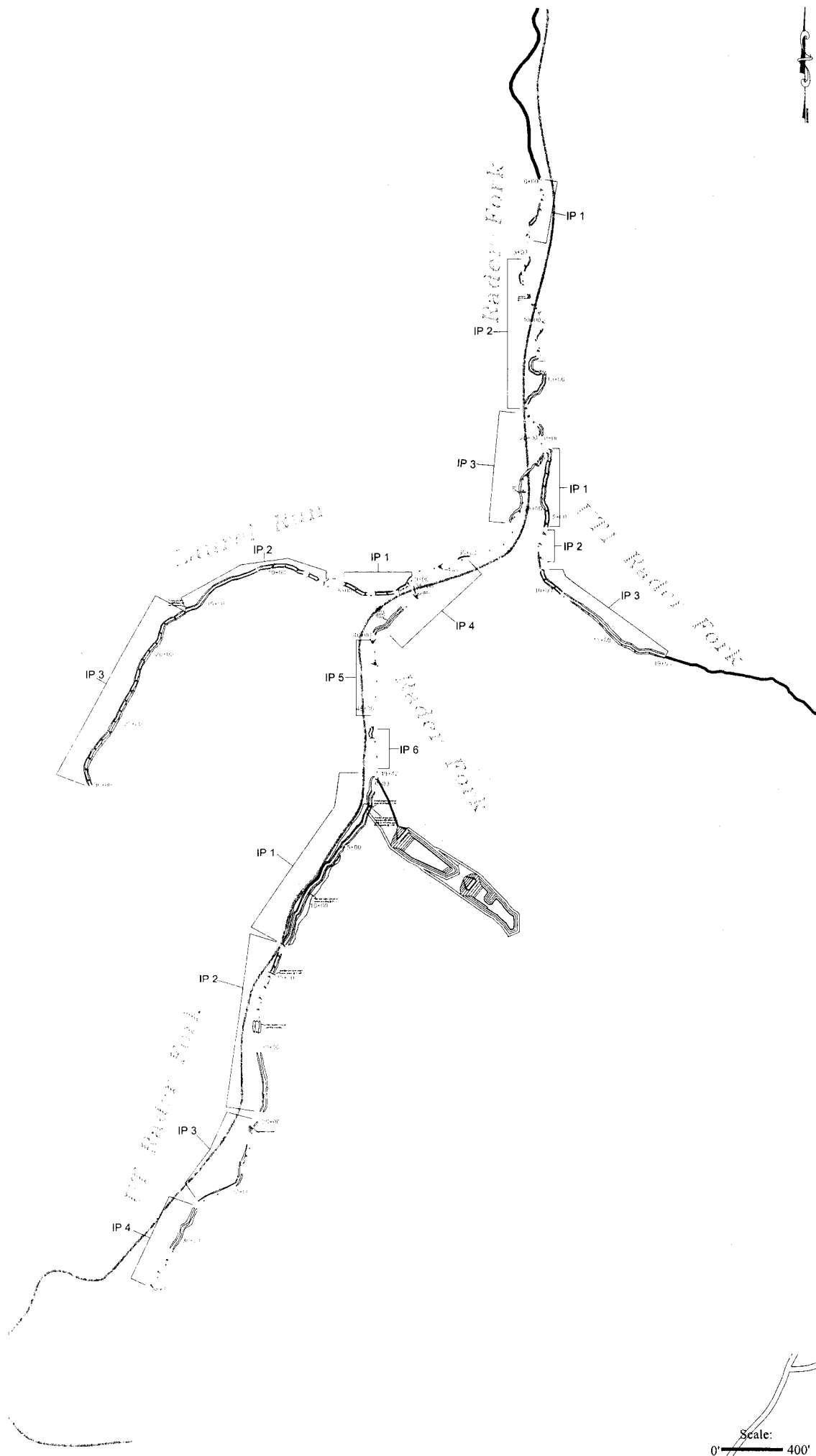
STAGE 86

STAGE 87

STAGE 88

STAGE 89

STAGE 90



Legend

Riparian Planting



Bankfull Bench,
Regrade banks,
Access Floodplain
Toe Protection

Step pools



Reposition LWD to form toe protection.

Cross Vane



Monitoring Station

Address Co



Remove Debris Jam

Rock Vane



Reposition root was

Culvert



Flat rock to prevent scouring

GT	Gene*	CPD Location	Recommendation
1500-1540			Remove this
1540-1545			Remove this
1545-1548			Remove this
1548-1550			Remove this
1550-1555			Remove this
1555-1560			Remove this
1560-1565			Remove this
1565-1570			Remove this
1570-1575			Remove this
1575-1580			Remove this
1580-1585			Remove this
1585-1590			Remove this
1590-1595			Remove this
1595-1600			Remove this
1600-1605			Remove this
1605-1610			Remove this
1610-1615			Remove this
1615-1620			Remove this
1620-1625			Remove this
1625-1630			Remove this
1630-1635			Remove this
1635-1640			Remove this
1640-1645			Remove this
1645-1650			Remove this
1650-1655			Remove this
1655-1660			Remove this
1660-1665			Remove this
1665-1670			Remove this
1670-1675			Remove this
1675-1680			Remove this
1680-1685			Remove this
1685-1690			Remove this
1690-1695			Remove this
1695-1700			Remove this
1700-1705			Remove this
1705-1710			Remove this
1710-1715			Remove this
1715-1720			Remove this
1720-1725			Remove this
1725-1730			Remove this
1730-1735			Remove this
1735-1740			Remove this
1740-1745			Remove this
1745-1750			Remove this
1750-1755			Remove this
1755-1760			Remove this
1760-1765			Remove this
1765-1770			Remove this
1770-1775			Remove this
1775-1780			Remove this
1780-1785			Remove this
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1790-1795			Remove this
1795-1800			Remove this
1800-1805			Remove this
1805-1810			Remove this
1810-1815			Remove this
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1830-1835			Remove this
1835-1840			Remove this
1840-1845			Remove this
1845-1850			Remove this
1850-1855			Remove this
1855-1860			Remove this
1860-1865			Remove this
1865-1870			Remove this
1870-1875			Remove this
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1880-1885			Remove this
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1890-1895			Remove this
1895-1900			Remove this
1900-1905			Remove this
1905-1910			Remove this
1910-1915			Remove this
1915-1920			Remove this
1920-1925			Remove this
1925-1930			Remove this
1930-1935			Remove this
1935-1940			Remove this
1940-1945			Remove this
1945-1950			Remove this
1950-1955			Remove this
1955-1960			Remove this
1960-1965			Remove this
1965-1970			Remove this
1970-1975			Remove this
1975-1980			Remove this
1980-1985			Remove this
1985-1990			Remove this
1990-1995			Remove this
1995-2000			Remove this

[illegible][illegible]

LIFE IN THE CITY	
1. How many people live in your city?	Approximately 100,000 people live in my city.
2. How many people live in your country?	Approximately 10 million people live in my country.
3. How many people live in your state?	Approximately 1 million people live in my state.
4. How many people live in your neighborhood?	Approximately 10,000 people live in my neighborhood.
5. How many people live in your city?	Approximately 100,000 people live in my city.
6. How many people live in your country?	Approximately 10 million people live in my country.
7. How many people live in your state?	Approximately 1 million people live in my state.
8. How many people live in your neighborhood?	Approximately 10,000 people live in my neighborhood.
9. How many people live in your city?	Approximately 100,000 people live in my city.
10. How many people live in your country?	Approximately 10 million people live in my country.
11. How many people live in your state?	Approximately 1 million people live in my state.
12. How many people live in your neighborhood?	Approximately 10,000 people live in my neighborhood.
13. How many people live in your city?	Approximately 100,000 people live in my city.
14. How many people live in your country?	Approximately 10 million people live in my country.
15. How many people live in your state?	Approximately 1 million people live in my state.
16. How many people live in your neighborhood?	Approximately 10,000 people live in my neighborhood.
17. How many people live in your city?	Approximately 100,000 people live in my city.
18. How many people live in your country?	Approximately 10 million people live in my country.
19. How many people live in your state?	Approximately 1 million people live in my state.
20. How many people live in your neighborhood?	Approximately 10,000 people live in my neighborhood.

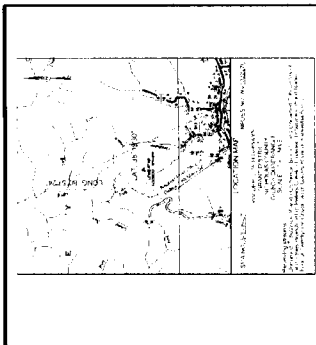


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Rader Fork Watershed Restoration Map
Alex Energy, Inc.
Lonestar Surface Mine

5 of 7



Connectional Nexus to Jurisdictional Channels

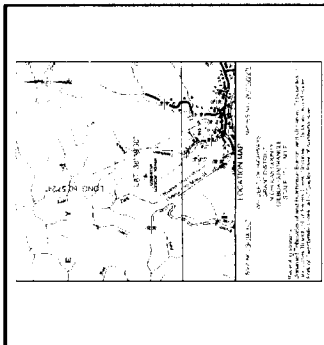
Re-established (temporarily impacted) Stream Channel

Stream Name	Length	Stream Order	Stream Type	Stream Class	Stream Status	Stream Notes
RTT 2	1.0	1	Stream	Stream	Stream	Stream
RTT 3	1.0	1	Stream	Stream	Stream	Stream
RTT 4	1.0	1	Stream	Stream	Stream	Stream
RTT 5	1.0	1	Stream	Stream	Stream	Stream
RTT 6	1.0	1	Stream	Stream	Stream	Stream
RTT 7	1.0	1	Stream	Stream	Stream	Stream
RTT 8	1.0	1	Stream	Stream	Stream	Stream
RTT 9	1.0	1	Stream	Stream	Stream	Stream
RTT 10	1.0	1	Stream	Stream	Stream	Stream
RTT 11	1.0	1	Stream	Stream	Stream	Stream
RTT 12	1.0	1	Stream	Stream	Stream	Stream
RTT 13	1.0	1	Stream	Stream	Stream	Stream
RTT 14	1.0	1	Stream	Stream	Stream	Stream
RTT 15	1.0	1	Stream	Stream	Stream	Stream
RTT 16	1.0	1	Stream	Stream	Stream	Stream
RTT 17	1.0	1	Stream	Stream	Stream	Stream
RTT 18	1.0	1	Stream	Stream	Stream	Stream
RTT 19	1.0	1	Stream	Stream	Stream	Stream
RTT 20	1.0	1	Stream	Stream	Stream	Stream
RTT 21	1.0	1	Stream	Stream	Stream	Stream
RTT 22	1.0	1	Stream	Stream	Stream	Stream
RTT 23	1.0	1	Stream	Stream	Stream	Stream
RTT 24	1.0	1	Stream	Stream	Stream	Stream
RTT 25	1.0	1	Stream	Stream	Stream	Stream
RTT 26	1.0	1	Stream	Stream	Stream	Stream
RTT 27	1.0	1	Stream	Stream	Stream	Stream
RTT 28	1.0	1	Stream	Stream	Stream	Stream
RTT 29	1.0	1	Stream	Stream	Stream	Stream
RTT 30	1.0	1	Stream	Stream	Stream	Stream
RTT 31	1.0	1	Stream	Stream	Stream	Stream
RTT 32	1.0	1	Stream	Stream	Stream	Stream
RTT 33	1.0	1	Stream	Stream	Stream	Stream
RTT 34	1.0	1	Stream	Stream	Stream	Stream
RTT 35	1.0	1	Stream	Stream	Stream	Stream
RTT 36	1.0	1	Stream	Stream	Stream	Stream
RTT 37	1.0	1	Stream	Stream	Stream	Stream
RTT 38	1.0	1	Stream	Stream	Stream	Stream
RTT 39	1.0	1	Stream	Stream	Stream	Stream
RTT 40	1.0	1	Stream	Stream	Stream	Stream
RTT 41	1.0	1	Stream	Stream	Stream	Stream
RTT 42	1.0	1	Stream	Stream	Stream	Stream
RTT 43	1.0	1	Stream	Stream	Stream	Stream
RTT 44	1.0	1	Stream	Stream	Stream	Stream
RTT 45	1.0	1	Stream	Stream	Stream	Stream
RTT 46	1.0	1	Stream	Stream	Stream	Stream
RTT 47	1.0	1	Stream	Stream	Stream	Stream
RTT 48	1.0	1	Stream	Stream	Stream	Stream
RTT 49	1.0	1	Stream	Stream	Stream	Stream
RTT 50	1.0	1	Stream	Stream	Stream	Stream
RTT 51	1.0	1	Stream	Stream	Stream	Stream
RTT 52	1.0	1	Stream	Stream	Stream	Stream
RTT 53	1.0	1	Stream	Stream	Stream	Stream
RTT 54	1.0	1	Stream	Stream	Stream	Stream
RTT 55	1.0	1	Stream	Stream	Stream	Stream
RTT 56	1.0	1	Stream	Stream	Stream	Stream
RTT 57	1.0	1	Stream	Stream	Stream	Stream
RTT 58	1.0	1	Stream	Stream	Stream	Stream
RTT 59	1.0	1	Stream	Stream	Stream	Stream
RTT 60	1.0	1	Stream	Stream	Stream	Stream
RTT 61	1.0	1	Stream	Stream	Stream	Stream
RTT 62	1.0	1	Stream	Stream	Stream	Stream
RTT 63	1.0	1	Stream	Stream	Stream	Stream
RTT 64	1.0	1	Stream	Stream	Stream	Stream
RTT 65	1.0	1	Stream	Stream	Stream	Stream
RTT 66	1.0	1	Stream	Stream	Stream	Stream
RTT 67	1.0	1	Stream	Stream	Stream	Stream
RTT 68	1.0	1	Stream	Stream	Stream	Stream
RTT 69	1.0	1	Stream	Stream	Stream	Stream
RTT 70	1.0	1	Stream	Stream	Stream	Stream
RTT 71	1.0	1	Stream	Stream	Stream	Stream
RTT 72	1.0	1	Stream	Stream	Stream	Stream
RTT 73	1.0	1	Stream	Stream	Stream	Stream
RTT 74	1.0	1	Stream	Stream	Stream	Stream
RTT 75	1.0	1	Stream	Stream	Stream	Stream
RTT 76	1.0	1	Stream	Stream	Stream	Stream
RTT 77	1.0	1	Stream	Stream	Stream	Stream
RTT 78	1.0	1	Stream	Stream	Stream	Stream
RTT 79	1.0	1	Stream	Stream	Stream	Stream
RTT 80	1.0	1	Stream	Stream	Stream	Stream
RTT 81	1.0	1	Stream	Stream	Stream	Stream
RTT 82	1.0	1	Stream	Stream	Stream	Stream
RTT 83	1.0	1	Stream	Stream	Stream	Stream
RTT 84	1.0	1	Stream	Stream	Stream	Stream
RTT 85	1.0	1	Stream	Stream	Stream	Stream
RTT 86	1.0	1	Stream	Stream	Stream	Stream
RTT 87	1.0	1	Stream	Stream	Stream	Stream
RTT 88	1.0	1	Stream	Stream	Stream	Stream
RTT 89	1.0	1	Stream	Stream	Stream	Stream
RTT 90	1.0	1	Stream	Stream	Stream	Stream
RTT 91	1.0	1	Stream	Stream	Stream	Stream
RTT 92	1.0	1	Stream	Stream	Stream	Stream
RTT 93	1.0	1	Stream	Stream	Stream	Stream
RTT 94	1.0	1	Stream	Stream	Stream	Stream
RTT 95	1.0	1	Stream	Stream	Stream	Stream
RTT 96	1.0	1	Stream	Stream	Stream	Stream
RTT 97	1.0	1	Stream	Stream	Stream	Stream
RTT 98	1.0	1	Stream	Stream	Stream	Stream
RTT 99	1.0	1	Stream	Stream	Stream	Stream
RTT 100	1.0	1	Stream	Stream	Stream	Stream

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On-Site Stream Re-establishment Map
 Alex Energy, Inc.
 Lonestar Surface Mine



Connecticut (New) to Jurisdictional Channels

Established/Created Stream Channel

Channel	Length (ft)	Width (ft)	Depth (ft)	Flow (cfs)	Velocity (ft/s)	Area (sq ft)	Volume (cu ft)	Weight (lb)	Notes
Channel 001	100	10	2	10	2	200	2000	2000	Channel 001
Channel 002	100	10	2	10	2	200	2000	2000	Channel 002
Channel 003	100	10	2	10	2	200	2000	2000	Channel 003
Channel 004	100	10	2	10	2	200	2000	2000	Channel 004
Channel 005	100	10	2	10	2	200	2000	2000	Channel 005
Channel 006	100	10	2	10	2	200	2000	2000	Channel 006
Channel 007	100	10	2	10	2	200	2000	2000	Channel 007
Channel 008	100	10	2	10	2	200	2000	2000	Channel 008
Channel 009	100	10	2	10	2	200	2000	2000	Channel 009
Channel 010	100	10	2	10	2	200	2000	2000	Channel 010
Channel 011	100	10	2	10	2	200	2000	2000	Channel 011
Channel 012	100	10	2	10	2	200	2000	2000	Channel 012
Channel 013	100	10	2	10	2	200	2000	2000	Channel 013
Channel 014	100	10	2	10	2	200	2000	2000	Channel 014

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